Public Report for ESA 153-3

Company	Kohler Co.	**ESA Dates**	August 25 to 27, 2008
Plant		**ESA Type**	Steam
Product		**ESA Specialist**	Tom Tucker, P.E.

Introduction:

The United States Department of Energy (DOE) "Save Energy Now" program completed an Energy Savings Assessment (ESA) August 27, 2008 at the Kohler facility. The DOE Qualified Specialist/Energy Expert conducting the steam systems ESA was Tom Tucker, P.E. of Kinergetics LLC, Madison, Wisconsin.

Objective of ESA:

Identify steam system improvement recommendations, train plant personnel how to correctly model the current system and predict potential savings using the Steam System Scoping Tool software (SSST).

Focus of Assessment:

Steam systems

Approach for ESA:

The first day was spent in training, and the second two days were spent in the plant observing steam systems.

General Observations of Potential Opportunities:

The following section briefly discusses the projects identified for additional investigation or implementation. A qualifier is assigned to each project – *near-term, medium-term* or *long-term.* These descriptors are identified as follows:

- *Near-term* opportunities would include actions that could be taken as improvements in operating practices, maintenance of equipment or relatively low cost actions or equipment purchases.
- *Medium-term* opportunities would require purchase of additional equipment and/or changes in the system. It would be necessary to carryout further engineering and return on investment analysis.
- *Long-term* opportunities would require testing of new technology and confirmation of performance of these technologies under the plant operating conditions with economic justification to meet the corporate investment criteria.

Near-Term Opportunities

- Reduce Steam Demand – reduce process idle time
- Improve steam and condensate system insulation
- Improve Condensate Return – repair steam and condensate leaks
- Insulation – add insulation to reduce process heat loss

Medium-Term Opportunities

- ❑ Reduce steam demand – reduce/eliminate blow through steam venting.
- ❑ Boiler Efficiency - recover sensible heat from boiler blow down.
- ❑ Boiler Efficiency Improvement – install boiler economizers

Long-Term Opportunities

None identified

Management Support and Comments:

The facility is dedicated to reducing energy consumption throughout its plants worldwide.